



The Chinese University of Hong Kong
Peter Hung Pain Research Institute (PHPRI)–
Department of Biomedical Engineering (BME)
Joint Seminar



From Scaffolds to Systems: Pioneering the Next Era of Biological Innovation



Professor CHEN Yong

CNRS Research Director (Emeritus)

Head of the Laboratory for Microfluidics

Ecole Normale Supérieure, Paris, France

Date : 29 September 2025 (Monday)
Time : 3:00 pm
Venue : Room 1122, William M W Mong Engineering Building, CUHK

Abstract

Despite rapid advances in human tissue and system modeling, we are still far from establishing a coherent framework that integrates scientific capabilities with societal needs. In this talk, we will share examples from our work that tackle key challenges in the field, including the development of artificial basement membranes, biomimetic scaffolds, plug-and-play devices, and real-time monitoring systems. We will also demonstrate the flexibility and scalability of this platform for studying diverse cell types and cell organizations—ranging from neural, cardiac, and alveolar systems to flat and lumenalized epithelial structures and cell barriers. Finally, we will explore how ChatGPT can support daily research by enhancing knowledge generation both quantitatively and qualitatively.

Biography

Professor Yong CHEN, Emeritus Research Director at the French National Centre for Scientific Research (CNRS) at the École Normale Supérieure (ENS), Paris. In the past, he has served as Professor of ENS, Adjunct Professor at Kyoto University's Institute for Integrated Cell-Material Sciences, Changjiang Chair Professor at Peking University, and Distinguished Chair Professor at The Hong Kong Polytechnic University. He has published over 500 papers in the fields of nanostructure physics and bioengineering, holds 30+ patents, and supervised over 50 doctoral and postdoctoral researchers.

*** ALL ARE WELCOME ***

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